DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-003029 Address: 333 Burma Road **Date Inspected:** 16-Jun-2008

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1500 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes C.G. Luang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A Yes N/A **Qualified Welders:** No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG** Deck Segments and Sub-assemblies

Summary of Items Observed:

The Quality Assurance (QA) Inspector, Mahlon Lindenmuth, arrived on site at the Zhenhua Port Machinery Company facility on Changxing island, China to periodically monitor welding and Quality Control functions. While on site the Quality Assurance Inspector observed and/or discovered the following:

QA Inspector, Lindenmuth, observed the work being performed in Bay 2 of the New OBG. ZPMC personnel were performing various functions related to the fabrication of the OBG Side Plates and Bottom Plates as well as the deck sections in the jig fixture. The fabrication performed includes but is not limited to the preparation of areas where temporary welds for strongbacks are located, bevel preparation and welding of the Complete Joint Penetration welds (CJP)on Side Plates and Bottom Plates, heat straightening of Side Plates and Bottom Plates.

South Jig Fixture:

*Segment 3AE- Caltrans QA Inspector, Lindenmuth, observed ZPMC personnel performing air carbon arc gouging on the Complete Joint Penetration weld joining 3AE-D6 to 3AE-C5. The gouging is being performed on order to remove discontinuities discovered by Ultrasonic Testing (UT) performed by ZPMC QC personnel. This a first time repair on this joint. Magnetic Particle Testing(MT) will be performed by ZPMC QC after excavations have been cleaned by grinding.

*Segment 4BE- ZPMC personnel have excavated a portion of the CJP weld that joins the 4BE-D6 to the 4BE-C5. The excavation is approximately 275mm long and 10mm in depth. ABF Representative, Peter Shaw explained that discontinuities were discovered after UT was performed, by ZPMC QC, on the repair area. This will be a second time repair on the weld joint.

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

Shop Welding:

*SEG026A-003- Caltrans QA Inspector, Lindenmuth, observed ZPMC personnel performing air carbon arc gouging on the root side of the CJP weld joining side plate SP564A to side plate SP524A. The backgouging is part of the Weld Procedure (WPS) and is performed after the welding of the face side is complete and the ceramic backing is removed.

Summary of Conversations:

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Lindenmuth, Mahlon	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer